II. Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-6. (cancelled)

Claim 7. (currently amended) A suppository based delivery system for induction of an immune response, said suppository comprising:

(a) a vaccine or vaccine adjuvant(s) of ~~whole or fractionated viral or other~~ microbial pathogens, ~~or their purified cellular constituents, whether native, mutated, synthetic, cloned or recombinantly expressed and combinations thereof, that comprises nucleic acids, proteins, lipids, or combinations thereof~~ capable of producing humoral- or cellular-mediated immunity in humans ~~or animals~~; and

(b) a suppository base, comprising ~~polyethylene glycol or a combination~~ pharmaceutically acceptable amounts of polyethylene glycol and polysorbate;

wherein the suppository is adapted to be inserted into the ~~anorectal or~~ urogenital orifice of a human ~~or animal~~ so as to allow the suppository to be in contact with tissues of the ~~anorectal or~~ urogenital orifice to facilitate transfer of suppository material therethrough~~, and~~

~~wherein said combination is comprised of about 75% to about 98% by weight polyethylene glycol and about 2% to about 25% by weight polysorbate~~.

Claims 8-11. (cancelled)

Claim 12. (currently amended) A suppository-based delivery system for induction of an immune response, said suppository comprising:

(a) a vaccine ~~or vaccine adjuvant(s)~~ comprising ~~purified, mutated, synthetic or genetically engineered constituents of known pathogens of urogenital pathogens,~~

~~anorectally pathogens and combinations thereof~~ whole microbial pathogens capable of producing humoral- or cellular-mediated immunity in humans; and

(b) a suppository base comprising ~~polyethylene glycol or~~ a combination of about 98% by weight polyethylene glycol and about 2% by weight polysorbate;

~~wherein said combination is comprised of about 75% to about 98% by weight polyethylene glycol and about 2% to about 25% by weight polysorbate, wherein the polyethylene glycol has an average molecular weight of about 950 to about 3700, and wherein the suppository comprises from about 50% to greater than 99% by weight of the suppository base; wherein the~~ said suppository ~~is~~ adapted to be inserted vaginally ~~or rectally~~ so as to allow the suppository to be in contact with mucous membrane to facilitate transfer of vaccine ~~or vaccine adjuvant(s)~~ material therethrough.

Claim 13. (cancelled)

Claims 14-17. (cancelled)

Claim 18. (currently amended) A method for producing an immune response in humans or animals, said method comprising the steps of:

(a) inserting a suppository into ~~an anorectal or~~ a urogenital orifice of a human ~~or animal~~, wherein said suppository comprises a vaccine or vaccine adjuvant(s) ~~material comprised of whole, fractionated viral or other~~ of microbial pathogens, ~~or their purified cellular constituents, whether native, mutated, synthetic, cloned or recombinantly expressed, that comprises nucleic acids, proteins, or combinations thereof~~ capable of producing humoral or cellular-mediated immunity against urogenital ~~or anorectal~~ disease in humans ~~or animals~~ and a suppository base, wherein the suppository base comprises ~~polyethylene glycol or a combination~~ pharmaceutically acceptable amounts of polyethylene glycol and polysorbate; and

(b) contacting the suppository with mucosal tissue at and internal to the ~~anorectal or~~ urogenital orifice to facilitate transfer of the vaccine or vaccine adjuvant material therethrough and induce an immune response in the human ~~or animal, and~~

~~wherein said combination is comprised of about 75% to about 98% by weight polyethylene glycol and about 2% to about 25% by weight polysorbate~~.

Claims 19-20 (cancelled)

Claim 21. (New) The suppository-based delivery system of claim 7, wherein said suppository base comprises about 98% of by weight of said polyethylene glycol and about 2% by weight of said polysorbate.

Claim 22. (New) The suppository-based delivery system of claim 7 which further comprises thimersol as a preservative.

Claim 23. (New) The suppository-based delivery system of claim 7, wherein said urogenital orifice is a vagina.

Claim 24. (New) The suppository-based delivery system of claim 12, which further comprises thimersol as a preservative.

Claim 25. (New) The method of claim 18, wherein said suppository base comprises about 98% of said polyethylene glycol and about 2% of said polysorbate.

Claim 26. (New) The method of claim 18, wherein said urogenital orifice is a vagina.

Claim 27. (New) A method of providing prophylaxis against a urogenital infectious disease comprising urogenitally administering a suppository-based delivery system of claim 7 to a human.

Claim 28. (New) The method of claim 27, wherein said urogenital infectious disease is a urinary tract infection.

Claim 29. (New) The method of claim 27, wherein said urogenital administration is vaginal administration.

Claim 30. (New) A method of providing prophylaxis against a urogenital infectious disease comprising vaginally administering a suppository-based delivery system of claim 12 to a human.

Claim 31. (New) The method of claim 30, wherein said urogenital infectious disease is a unrinary tract infection.